



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3910-1
Job Sheet 184125



Part No: D3910-1

Job Qty: 30 ea

Part Name: Crosstube Lug



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/3/18

Job Tracking No:

Due Date: 11/2/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: D3910 REV.E IPP REV:C 18.02.02 REMOVE FINISH DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Purchasing	30 pcs		11/2/18	0.00	0.00	Purchasing		<i>[Signature]</i> OCT 26 2018
120	Packaging	30 pcs		11/2/18	0.00	0.00	Packaging2		<i>[Signature]</i> OCT 26 2018
130	QC	30 pcs		11/2/18	0.00	0.00	QC6		38
180	Packaging	30 pcs		11/2/18	0.00	0.00	Packaging3-2	5023	<i>[Signature]</i> OCT 30 2018
190	QC21-SA	30 Ea		11/2/18	0.00	0.00	QC21		<i>[Signature]</i> OCT 30 2018

Part Op 110 - ISSUE PO TO METEC, NOTE ALODINE AND PAINT AS PER QSI 005
Descriptions: 120 - Ensure C of C is attach

PO 041245 x 30

OCT 02, 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2423	Lug Extrusion	3.9000 ft (.13 ea)	110-Purchasing	5121789
D3910-1P	Crosstube Lug	30 pcs (1 ea)	110-Purchasing	5121789

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Purchasing	D2423	4	279	0
	D3910-1P	30	0	0

1138951 START: 2:45 TEMP: 320° FINISH: 3:15

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Crosstube Lug	4.450Inches ± 0.030	4.480 4.420		
2	Crosstube Lug	1.380Inches ± 0.030	1.410 1.350		
3	Crosstube Lug	0.270Inches ± 0.030	0.300 0.240	reference	
4	Crosstube Lug	0.310Inches ± 0.030	0.340 0.280		
5	Crosstube Lug	0.735Inches ± 0.010	0.745 0.725	reference	
6	Crosstube Lug	2.200Inches ± 0.030	2.230 2.170		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Container No: S121790



Part: D3910-1

Job No: 184125

Serial No/Batch: S121790

Revision: E

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 10/26/18

Description: Work Order Deviation

ON

work ☐Scrap ☐-as-is ☐oved ☐Skid-tube ☐Machining ☐Thermoforming ☐Large Fab ☐Cross tube ☐Small Fab ☐Finishing ☐Composite ☐Water Jet ☐Prod. Eng. Coord. ☐Rec/Store/Packaging ☐Supplier ☐Engineering ☐Quality ☐Other ☐

QTY Effective :

MRB (QSI042) Approval

Disposition

Completed By

Lead hand / Supervisor
Approval VerificationQC / QA Coordinator
Approval

Root Cause

FAULT CATEGORY

Environment ☐Design ☐Doc/Data ☐Equip/Tooling ☐Handling/Pre ☐Material ☐Internal Transport ☐Tribal Knowledge ☐LOA ☐Substation ☐Past Expiry Date ☐Misidentified ☐No Re-verification ☐Operator ☐Offset/Setup ☐Supplier ☐Training ☐Use for Testing ☐Poor Information ☐Rushing ☐Product Improvement ☐Process Improvement ☐Manufacturing Process ☐Past Due ☐Pressure/Forced ☐Bending ☐Centre Not Concentric ☐Cracks ☐Crimp/Kink/Ripple/Wave ☐Cuffs ☐Crushing ☐Heat Treat ☐Wave/Twist in Tube ☐Marks/Chatter ☐Temperature/Cure ☐Set-up ☐BOM/Route ☐Broken/Damage/Defect ☐Inspection Incomplete/Unqualified ☐Contamination ☐Countersink ☐Cut Too Short ☐Instructions Incomplete/Unclear ☐Drill Holes ☐Power Loss/Surge ☐Folio/Program ☐Grain ☐Weld ☐Wrong Stock Pulled ☐Out of Sequence ☐Off-set ☐Mislabeled ☐Fit/Function ☐Misaligned/off center ☐Positioned Wrong ☐Outside Dimensions ☐Over/Under tolerance ☐Part Incorrect ☐Part Lost/Missing ☐Part Moved ☐Drawing ☐Finish ☐Misread ☐Turning Sequence ☐

OTHER :

7	Crosstube Lug	0.375Inches $\pm$ 0.010	0.385 0.365	
8	Crosstube Lug	0.191Inches $\begin{matrix} + 0.005 \\ - 0.001 \end{matrix}$	0.196 0.190	Diameter
9	Crosstube Lug	0.380Inches $\pm$ 0.030	0.410 0.350	Radius
10	Crosstube Lug	0.380Inches $\pm$ 0.030	0.410 0.350	
11	Crosstube Lug	0.625Inches $\pm$ 0.010	0.635 0.615	
12	Crosstube Lug	0.375Inches $\pm$ 0.010	0.385 0.365	
13	Crosstube Lug	3.700Inches $\pm$ 0.010	3.710 3.690	
14	Crosstube Lug	0.625Inches $\pm$ 0.010	0.635 0.615	
15	Crosstube Lug	0.375Inches $\pm$ 0.010	0.385 0.365	
16	Crosstube Lug	0.340Inches $\pm$ 0.030	0.370 0.310	Radius

Plex 10/3/18 8:52 AM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

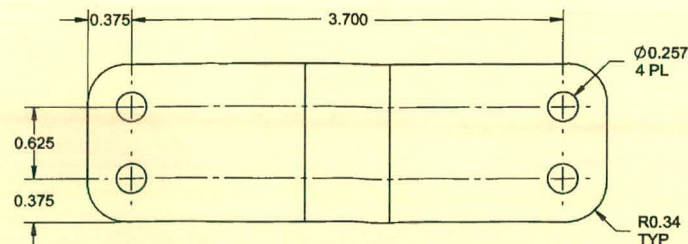
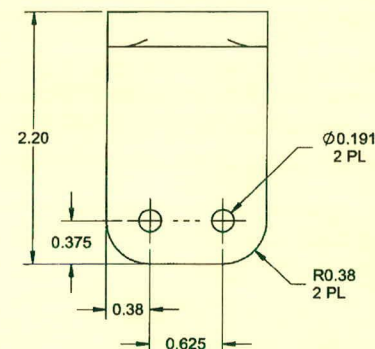
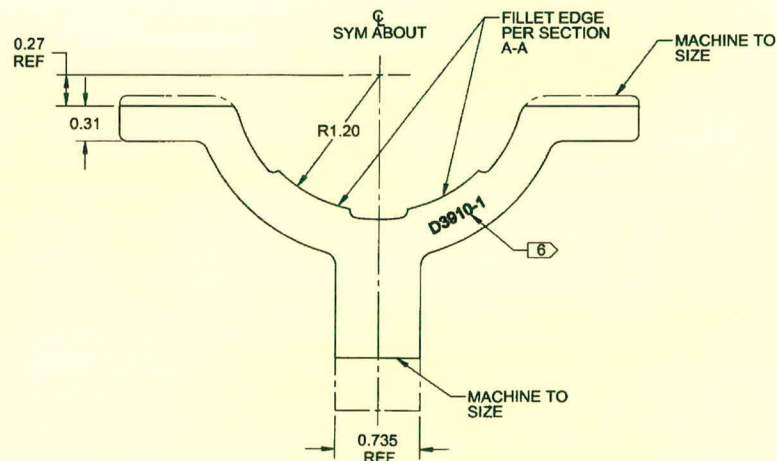
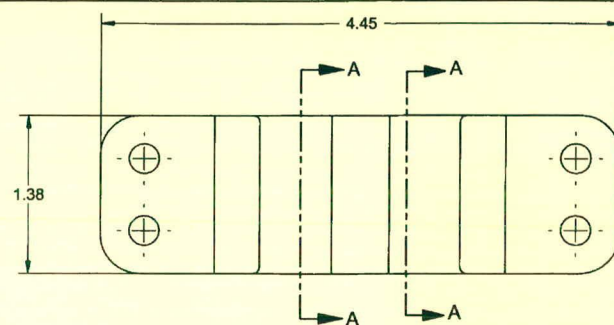
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐				



ROUND EDGE
R0.06 MIN - R0.10 MAX
2 PL

SECTION A-A



D3910-1 X-TUBE LUG

RELEASED

2014 JUN 05

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D3910	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	X-TUBE LUG (350)	NTS
DATE	14.05.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041245**

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

PO No: PO041245
PO Date: 10/3/18
Due Date: 11/2/18
Purchase Order
Revision:
Revision Date:

Attention: Walz, Shigi

Via: Ground
Pynt Terms: Net 60

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Freight Terms:
Special Comments:

Revision

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	184126	D4091-1P			Lug : Various STC's As Per Dwg D4091 Rev. A Alodine and Paint as Per QSI 005	Firmed	-	11/2/18	30 pcs	0 pcs	30 pcs	\$17.40/pcs	\$522.00
									30 X OCT 12 2018	<i>[Signature]</i>			
2	184122	D3910-5P			Crosstube Lug : Various STC's As Per Dwg D3910 Rev. E Alodine and Paint as Per QSI 005	Firmed	-	11/2/18	30 pcs	0 pcs	30 pcs	\$17.40/pcs	\$522.00
									30 X OCT 26 2018	<i>[Signature]</i>			
3	184125	D3910-1P			Crosstube Lug : Various STC's As Per Dwg D3910 Rev. E Alodine and Paint as pe QSI 005	Firmed	-	11/2/18	30 pcs	0 pcs	30 pcs	\$17.40/pcs	\$522.00
									30 X OCT 26 2018	<i>[Signature]</i>			

Grand Total: \$1,566.00

DAS
38
9-89

100
80
60



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
PO041245

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY
A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 10/10/18 8:44 AM dart.Lussier.Patrick

Packing List

Bill Dart Aerospace Ltd.
To: 1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship Dart Aerospace Ltd.
To: 1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Att. Patrick Lussier

Shipment No: 24166
Shipment Date: 25-Oct-2018
Ship Via: Pick up at METEC
Order Number: 3069
Order Date: 10/03/18

Customer Code: DART
Phone: (613) 632-9577
PO Number: PO041245 ✓
Terms: Net 60 Days

----- Quantity -----								Job
Item	Open	Shipped	B/O	Canceled	Unit	Description	Revision	Number
2	30	30 ✓	0	0	EA	DART-D3910-5P Crosstube Lug		3069-02
3	30	30 ✓	0	0	EA	DART-D3910-1P Crosstube Lug		3069-03

JA
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The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.

Received In Good Order By
Att. Patrick Lussier



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev.#	Material Batch #	Paint Batch #	P.O. Number
14 ✓	D3910-5 ✓	Crosstube Lug	E	B160522	Unpainted	41245 ✓
16 ✓	D3910-5 ✓	Crosstube Lug	E	B101186	Unpainted	41245 ✓
30 ✓	D3910-1 ✓	Crosstube Lug	E	B101186	Unpainted	41245 ✓

DA
38
9-86

MATERIAL: supplied by DART

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

Heather Nixon

Vankleek Hill, October 25, 2018

